

ITW

Attorney Docket No. 0553-0402

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| In Re Application of:  | <ul><li>) I hereby certify that this correspondence</li><li>) is being deposited with the United States</li></ul> |
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| Satoshi SEO et al  | ) Postal Service as first class mail in an envelope addressed to:   |
| Serial No.: 10/809,130   | ) Commissioner for Patents, P.O. Box 1450,  |
| Filed: March 25, 2004  | ) Alexandria, VA 22313-1450, on <u>Oct. 7</u> ,<br>) 2005   |
| Art Unit: 1614   | Cistie M. Noll  |
| For: ORGANIC-INORGANIC HYBRID MATERIAL, COMPONET FOR SYNTHESIZING THE SAME, AND MANUFACTURING METHOD OF THE SAME | •   |

## INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 C.F.R. §1.97, as revised on February 4, 1992, 1135 OG 23-24, Applicant hereby calls the Examiner's attention to documents listed on the attached form, which documents may be material to the examination of this application. Pursuant to 37 CFR §1.98(a)(2)(i) copies of cited US patent and US patent application publications are not submitted herewith. Copies of foreign patent documents and non-patent literature documents are enclosed herewith for the Examiner's consideration.

The family of JP 06-033050 cited herein includes: US patent no. 5,432,014

The family of JP 2003-077661 cited herein includes: US patent application publication no. US 2002/0197393 A1

No inference should be drawn that the attached list sets forth a comprehensive investigation of the prior art, that any or all are pertinent to the invention, or that any apparatus disclosed is equivalent to the subject invention.

The citation of the above-discussed documents is not to be construed as an assertion that more pertinent art could not possibly be in existence. Citation of any document herein is not to be construed as an admission that any subject matter disclosed in the document is necessarily within the inventive field of endeavor, that any disclosure is necessarily prior in time to a particular date which may be relevant to the instant patent application, and/or that any disclosure is otherwise necessarily prior art with respect to the instant invention.

Applicant also respectfully reserves the right to later set forth how the instant invention is distinguished over the disclosure of any document or other art, including the disclosure of those documents discussed herein, that may be cited by the Examiner in rejecting a claim in the instant patent application.

The references submitted herewith on 1449 form #1 were cited in an international search report in related PCT application no. PCT/JP2003/003610, which shares the same priority as the present case. The documents submitted herewith on 1449 form #2 are cited and/or referenced within the specification of the present case.

A first office action, notice of allowance or issue fee notification has not been received in this case, so Applicant does not believe that a fee is due. However, if any such fee is required, please charge our Deposit Account No. 50/1039.

Respectfully submitted,

Mark J Murphy

Registration No: 34,225

COOK, ALEX, McFARRON, MANZO, CUMMINGS & MEHLER, LTD. 200 West Adams Street Suite 2850 Chicago, Illinois 60606 (312) 236-8500



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LIST OF PUBLICATIONS CITED BY APPLICANT

| <u>Atty Docket No.</u><br>0553-0402   | <u>Serial No.</u><br>10/809,130 |
|---------------------------------------|---------------------------------|
| <u>Applicant</u><br>Satoshi SEO et al |                                 |
| Filing Date                           | Group                           |

1614

### U.S. PATENT DOCUMENTS

March 25, 2004

| *EXAMINER<br>INITIAL | DOCUMENT<br>NUMBER                  | DATE                 | NAME                   | CLASS      | SUB-<br>CLASS | FILING<br>DATE       |
|----------------------|-------------------------------------|----------------------|------------------------|------------|---------------|----------------------|
|                      | 5,432,014<br>US 2002/<br>0197393 A1 | 07/11/95<br>12/26/02 | Sano et al<br>Kuwabara | 428<br>427 | 690<br>66     | 11/25/92<br>06/04/02 |

### FOREIGN PATENT DOCUMENTS

| DOCUMENT<br>NUMBER   | DATE   | APPLICANT   | English<br>Abstract             | English<br>Trans. | FILING<br>DATE   |
|--|--|---|---------------------------------|-------------------|--|
| JP 06-033050<br>JP 09-102628<br>JP 09-279135<br>JP 10-259095<br>JP 11-031588<br>JP 11-273861<br>JP 2000-<br>306669<br>JP 2003-<br>073387<br>JP 2003- | 02/08/94<br>04/15/97<br>10/28/97<br>09/29/98<br>02/02/99<br>10/08/99<br>11/02/00<br>03/12/03 | Sanyo Electric Co Toray Ind. Inc. Toyota Central Res & Dev Lab Inc. Kaneko Kenzai KK NEC Corp. Asahi Glass Co Ltd Canon Inc. Canon Inc. Semiconductor | x<br>x<br>x<br>x<br>x<br>x<br>x |                   | 11/25/92<br>10/04/95<br>04/17/96<br>03/18/97<br>07/11/97<br>03/24/98<br>04/20/99<br>09/04/01<br>06/07/02 |
| <br>077661   |  | Energy Lab Co Ltd.  |                                 |                   |  |

# OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

(Include name of author (in CAPITAL LETTERS), title of article or item (book, magazine, journal, serial, symposium, catalog, etc.) date, pages(s), volume-issue number(s), publisher, city and/or country where published).

- 1) International Search Report re application no. PCT/JP2004/003610, dated June 22, 2004 (in Japanese).
- 2) Written Opinion re application no. PCT/JP2004/003610, dated June 22, 2004 (with partial translation).

### **EXAMINER:**

DATE CONSIDERED:

\*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP form. Draw line through citation if not in conformance and not considered. Include a copy of this form with the next communication to applicant.

| FORM #2                                    |                          | Atty Docket No.<br>0553-0402          | <u>Serial No.</u><br>10/809,130      |                     |                   |                |
|--|--------------------------|---------------------------------------|--------------------------------------|---------------------|-------------------|----------------|
| LIST OF PUBLICATIONS<br>CITED BY APPLICANT |                          | <u>Applicant</u><br>Satoshi SEO et al |                                      |                     |                   |                |
|  |                          |                                       | <u>Filing Date</u><br>March 25, 2004 | Group<br>1614       |                   |                |
|  |                          | U.S                                   | . PATENT DOCUMENTS                   |                     |                   |                |
| *EXAMINER<br>INITIAL                       | DOCUMENT<br>NUMBER       | DATE                                  | NAME                                 | CLASS               | SUB-<br>CLASS     | FILING<br>DATE |
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|  | FOREIGN PATENT DOCUMENTS |                                       |                                      |                     |                   |                |
|  | DOCUMENT<br>NUMBER       | DATE                                  | APPLICANT                            | English<br>Abstract | English<br>Trans. | FILING<br>DATE |
|  | JP 06-166501             | 06/14/94                              | Diacel Chem Ind<br>Ltd.              | Х                   |                   | 11/30/92       |
|  | JP 11-263615             | 09/28/99                              | Chugoku Marine<br>Paints Ltd.        | X                   |                   | 03/13/98       |
|  | JP 2002-<br>212422       | 07/31/02                              | Toyota Motor Corp.                   | X                   |                   | 01/17/01       |
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### OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

(Include name of author (in CAPITAL LETTERS), title of article or item (book, magazine, journal, serial, symposium, catalog, etc.) date, pages(s), volume-issue number(s), publisher, city and/or country where published).

- 1) SANCHEZ, C. et al, "Chemical Modification of Alkoxide Precursors," Journal of Non-Crystalline Solids, vol. 100, pp. 65-76 (1988).
- 2) SAKKA, S., "Science of Sol-Gel Method," Agune Shouhuu, Tokyo, pp.4-8 (1988)/with concise statement.
- 3) SHINMOU, K. et al, "Fine-Patterning of ZrO<sub>2</sub> Thin Films by the Photolysis of Chemically Modified Gel Films," Japanese Journal of Applied Physics, vol. 33, part 2, no. 8B, pp. L 1181- L 1184 (1994).
- 4) ERA, M. et al, "Organic-Inorganic Heterostructure Electroluminescent Device Using a Layered Perovskite Semiconductor  $(C_6H_5C_2H_4NH_3)_2Pbl_4$ ," Applied Physics Letters, vol. 65, no. 6, pp. 676-678, August 8, (1994).
- 5) WEN, J. et al, "Organic/Inorganic Hybrid Network Materials by the Sol-Gel Approach," Chem Mater, vol. 8, no. 8, pp. 1667-1681 (1996).
- 6) YAMADA, N. et al, "Synthesis and Dynamic Mechanical Behaviour of Inorganic-Organic Hybrids Containing Various Inorganic Components," J. Mater Chem., vol. 7, no. 8, pp. 1491-1495 (1997).
- 7) DANTAS DE MORAIS, T. et al, "Hybrid Organic-Inorganic Light-Emitting Diodes," Adv. Mater, vol. 11, no. 2, pp. 107-112 (1999).
- 8) Section 4 Optical Material Relation: "Manufacture and Application of Organic-Inorganic Composite Coating Thin Film," Organic-Inorganic Hybrid Material (Technical Data Collections) Technical Information Institute Co., Ltd., pp. 208-215, July 30, (1999)/with full English translation, pp. 1-11.
- 9) SCHNEIDER, M. et al, "Novel Electroluminescent Devices Based on Perylene-Doped Sol-Gel Layers," Adv. Mater, vol. 12, no. 5, pp. 351-354 (2000).
- 10) SAKKA, S., Concise Statement re: sol-gel method, Ceramics, vol. 37, no. 3, pp. 136-142 (2002).

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